

## **REFERENCE 22**

## PROJECT NOTE

## REGION II SITE ASSESSMENT TEAM 2

**To:** Selecto Flash, Inc. Site File**Date:** June 21, 2007**Page:** 1 of 7**From:** Michele Capriglione**Subject:** Groundwater Population within 4 Miles of the Selecto Flash, Inc. site

This project note documents the number of people served by public supply wells located within the 4-mile target distance limit of the Selecto Flash, Inc. site. Information on public supply wells (i.e., permit numbers, owners, and locations) was obtained from the New Jersey Department of Environmental Protection and the New Jersey Geological Survey at <http://www.state.nj.us/dep/njgs/geodata/dgs97-1.htm>. The location information was used determine which wells are located within the 4-mile target distance limit. Figure 3, included in this report displays the location of each public supply within the 4-mile target distance limit.

The owner of each public supply well was contacted to determine the drinking water population associated with each well. Attached to this project note is the list of public supply wells, their owners and the telephone logs documenting the conversations with the owners from which groundwater populations were calculated.

The following provides the breakdown of groundwater population within each distance ring of the 4-mile target distance limit of the Selecto Flash, Inc. site:

<u>Distance Ring</u>	<u>Well Owner</u>	<u>Well ID</u>	<u>Population</u>
0 to 0.25 Miles	No Wells	-	0
0.25 to 0.50 Miles	No Wells	-	0
0.50 to 1.0 Miles	Orange Water Department	Orange Park Well	5,478
	Orange Water Department	Brook Lane Well	Not In Service
1.0 to 2.0 Miles	South Orange Water Department	Well 17	555
	Orange Water Department	Gist Place Well	5,478
2.0 to 3.0 Miles	Orange Water Department	Well 6	5,478
3.0 to 4.0 Miles	Orange Water Department	Well 2	5,478
	Orange Water Department	Well 3	5,478
	Orange Water Department	Well 4	5,478
	Orange Water Department	Well 5	Not In Service
	East Orange Water Department	Canoe Brook Well 6	3,500
	Montclair Water Bureau	Glenfield Well	3,800
	Bloomfield Water Department	Well G	Not in Service
	Essex Fells Water Department	Well 2	1,375

**Summary:**

<u>Distance Ring</u>	<u>Total Population</u>
0 to 0.25 Mile	0
0.25 to 0.5 Mile	0
0.50 - 1.0 Mile	5,478
1.0 to 2.0 Miles	6,033
2.0 to 3.0 Miles	5,478
3.0 to 4.0 Miles	25,109

Signature



Michele Capriglione

WEL LID	PERMIT ID	OWNER	WELL NAME	ADDRESS	COUNTY	MUNICIPALITY	DEPTH	GEOLOGIC FORMATION	AQUIFER
2604763	26-04763	Bloomfield Water Dept	Well G (Well 1)	Memorial Drive	Essex	Bloomfield Town	380.00000	Passaic Formation - sandstone	Brunswick aquifer
2604700	26-04700	East Orange Water Dept	Canoe Brook Well 6	East Hobart Gap Rd	Essex	Livingston Twp	172.00000	Preakness basalt	basalt
4600201	46-00201	Essex Fells Water Dept	Well 2	Oval Rd	Essex	West Caldwell Boro	40.00000	Stratified drift	glacial sand and gravel
2603688	26-03688	Montclair Water Bureau	Well 3 (Glenfield Well)	Bloomfield Ave & Maple Ave	Essex	Montclair Town	300.00000	Passaic Formation - sandstone	Brunswick aquifer
2602262	26-02262	Orange Water Dept	Well 5	South Mountain Reservation	Essex	Millburn Twp	106.00000	Stratified drift	glacial sand and gravel
4600169	46-00169	Orange Water Dept	Well 2	South Mountain Reservation	Essex	Millburn Twp	113.00000	Stratified drift	glacial sand and gravel
4600170	46-00170	Orange Water Dept	Well 3		Essex	Millburn Twp	75.60000	Stratified drift	glacial sand and gravel
4600171	46-00171	Orange Water Dept	Well 4	Valley & Beach Sts	Essex	Millburn Twp	94.00000	Stratified drift	glacial sand and gravel
2603701	26-03701	Orange Water Dept	Well 6	Cherry Lane	Essex	West Orange Town	132.25000	Stratified drift	glacial sand and gravel
2603440	26-03440	Orange Water Dept	Orange Park Well	Oakwood Drive	Essex	Orange City	551.00000	Passaic Formation - sandstone	Brunswick aquifer
2604444	26-04444	Orange Water Dept	Brook Lane Well (Well 9)	Brook Lane	Essex	Orange City	506.00000	Passaic Formation - sandstone	Brunswick aquifer
2604322	26-04322	Orange Water Dept	Gist Place Well (Well 8)	Gist Place	Essex	Orange City	500.00000	Passaic Formation - sandstone	Brunswick aquifer
2601354	26-01354	South Orange Water Dept	Well 17	Grove Rd & South Orange Ave	Essex	South Orange Village	343.00000	Passaic Formation - sandstone	Brunswick aquifer

**PHONE CONVERSATION RECORD**

**Conversation with:**

Name Bob Galante

Company Orange Water Dept.

Address \_\_\_\_\_

Phone 973-678-7585

Subject Orange Water Dept. groundwater population distribution

Date 6.20.07

Time 2 PM

☒ Originator Placed Call

☐ Originator Received Call

W.O. No. 20113.011.001.0064.00

**Notes:**

There are 6 active wells in the Orange Water Department. Well 2, Well 3, Well 4, Well 6, Orange Park Well and Gist Place well. These wells serve 32,868 people. All 6 wells are located within the target distance limit of 4 miles of the SelectoFlash site.

No single well provides more than 40% to the total system. No surface water is in the system.

Wells 2, 3, 4 & 6 are blended then sent to UST holding area where the water is treated (corrosion control & sodium hydrochloride). The Orange Park and Gist Place well are treated at the well head (aeration for VOCs, corrosion control, and sodium hydrochloride) prior to being fed into the distribution lines.

32,868 people / 6 wells = 5,478

☐ File \_\_\_\_\_

☐ Tickle File \_\_\_\_\_

☐ Follow-Up By: \_\_\_\_\_

☐ Copy/Route To: \_\_\_\_\_

Follow-Up-Action: \_\_\_\_\_

Originator's Initials MC

(3)

**PHONE CONVERSATION RECORD**

**Conversation with:**

Name Harry Mansmann (HM)  
Company Executive Director of East  
Address Orange Water Commission

Phone 973 266-8869

Subject East Orange & South Orange groundwater population distribution

Date 6.1.20.07  
Time 4 AM/PM

☐ Originator Placed Call

☒ Originator Received Call

W.O. No. 20113-011-001-0064-00

**Notes:**

The Canoe Brook well 6, owned by East Orange Water Dept. is located within the 4-mile target distance limit of the Selecto Flash site. I spoke with HM to determine the groundwater population associated with this well.

There are 18 public supply wells blended with water purchased from the city of Newark. Purchased water = 10% of the system. No well contributes more than 40% to the total system. There are approx 70,000 people served by this system.  $70,000 - 7,000$  (purchased water) =  $63,000 / 18$  wells = 3,500 people per well (East Orange)

Well 17, owned by South Orange Water Dept which is part of the East Orange Water Commission is w/ 4 miles of the site. I spoke w/ HM to determine gw population associated w/ this well. South Orange serves approx 25,000 people a total of 2,250,000 gallons/day. 50,000 gallons/day are from well 17.

$2,250,000 / 50,000 = 45 \therefore 25,000 / 45 = 555$  people  
(South Orange well 17)

☐ File \_\_\_\_\_

☐ Tickle File \_\_\_\_\_

☐ Follow-Up By: \_\_\_\_\_

☐ Copy/Route To: \_\_\_\_\_

Follow-Up-Action: \_\_\_\_\_

Originator's Initials

MC

(4)

**PHONE CONVERSATION RECORD**

**Conversation with:**

Name Montclair Water Bureau  
Company Spoke w/ Gary  
Address \_\_\_\_\_

Date 6, 20, 07  
Time 9 (AM/PM)

☒ Originator Placed Call

☐ Originator Received Call

Phone 973-744-4600 ext: 3013 W.O. No. 20113.011.001.0064.00

Subject Montclair Water Bureau population distribution

**Notes:**

The Glenfield well, owned by Montclair Water Bureau, is located within the target distance limit of 4-miles of the Selecta Flash Site. I spoke w/ Gary of the Montclair Water Bureau to determine the GW population associated w/ the Glenfield well.

The total system is comprised of 3 wells and purchased water:  
3 wells 20%  
purchased water 80%

The three wells are : Glenfield well 50%  
Lorraine well 35%  
Rand well 15%

All the wells have air strippers on them to eliminate "regional VOC contamination in GW." The total system serves approx. 38,000 people.

20% = 7,600 people  $\therefore$  50% of 7,600 = 3,800 people.

- ☐ File \_\_\_\_\_  
☐ Tickle File 1 / 1  
☐ Follow-Up By: \_\_\_\_\_  
☐ Copy/Route To: \_\_\_\_\_

Follow-Up-Action: \_\_\_\_\_

Originator's Initials MC

(5)

**PHONE CONVERSATION RECORD**

**Conversation with:**

Name Bloomfield Water Dept.  
Company Spoke w/ Steve  
Address Capola

Date 6, 20, 07  
Time 11 AM/PM

Phone 973-680-4008

☐ Originator Placed Call

☐ Originator Received Call

W.O. No. 20113-011-001-0064-00

Subject Bloomfield Water Dept. GW population distribution

**Notes:** Well G, owned by Bloomfield Water Dept, is located within the 4 mile target distance limit of the Selecto Flash site. I spoke w/ Steve Capola of the Bloomfield Water Dept. to determine the GW population associated with Well G.

He reported that Well G is not in use and has not been in use since the 1980's. The water was too "hard" and residents complained about the water. The well is not in use, but, in the case of a fire emergency could be turned on and used by the fire department.

Residents of Bloomfield are served w/ water purchased from Newark Reservoir.

- ☐ File \_\_\_\_\_
- ☐ Tickle File \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_
- ☐ Follow-Up By: \_\_\_\_\_
- ☐ Copy/Route To: \_\_\_\_\_

Follow-Up-Action: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(6)

Originator's Initials MC



**PHONE CONVERSATION RECORD**

Conversation with:

Name Jack Paulman - Superintendent

Date 6, 26, 07

Company Essex Fells Water Dept

Time 10 (AM/PM)

Address \_\_\_\_\_

☐ Originator Placed Call

☒ Originator Received Call

Phone 973-228-8582

W.O. No. 20113.011.001.0064.00

Subject Essex Fells Water Department groundwater population distribution

Notes:

Well 2, owned by Essex Fells Water Dept. is located within the 4-mile target distance limit of the Selecto Flash Inc site. I spoke with Jack Paulman to determine the groundwater population associated with this well.

There are 16 wells associated with the Essex Fells system. No single well within that system provides more than 40% to the system total. No surface water is blended into the system. The system provides water to approx. 22,000 people. There is treatment on some of the 16 wells, however there is no treatment on well 2.

22,000 people / 16 wells = 1375 people served by Well 2 in the Essex Fells Water Dept.

☐ File \_\_\_\_\_

☐ Tickle File \_\_\_\_\_

☐ Follow-Up By: \_\_\_\_\_

☐ Copy/Route To: \_\_\_\_\_

Follow-Up-Action: \_\_\_\_\_

Originator's Initials MC

(7)